



Kōkua Community-based Monitoring Framework



Hawai'i Division of Aquatic Resources



Hawaii CZM Program
Coastal Zone Management



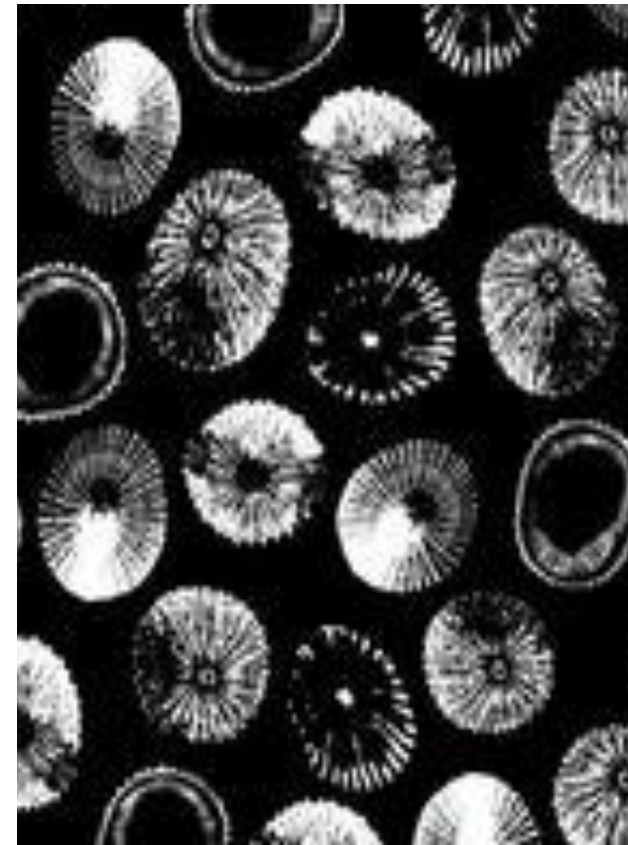
Kōkua Community-based Monitoring Project

- Phase 1 (2022 – 2023): Framework Development
 - CZM Program of Special Merit
 - Goals:
 - Develop framework
 - Pilot framework

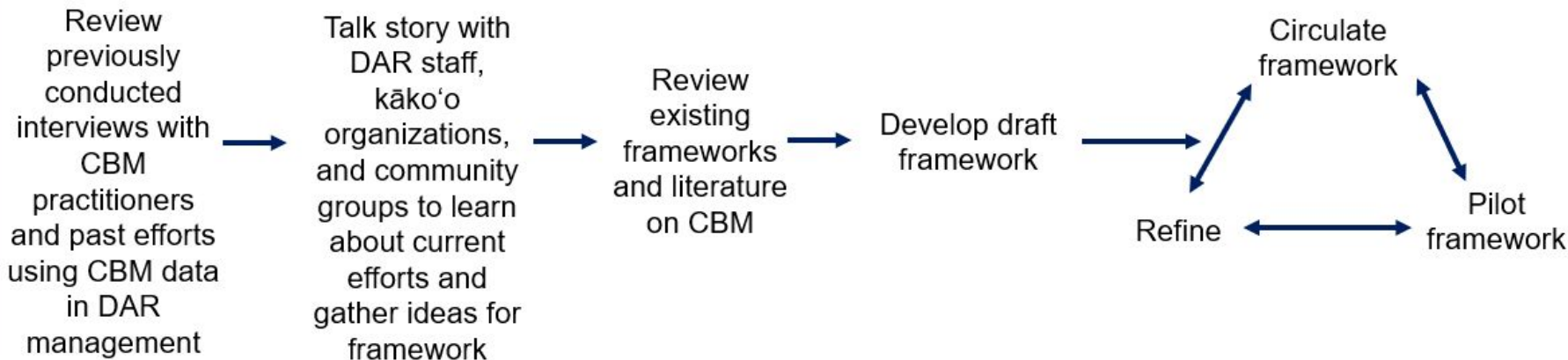


Kōkua:

To help without the expectation of anything in return.



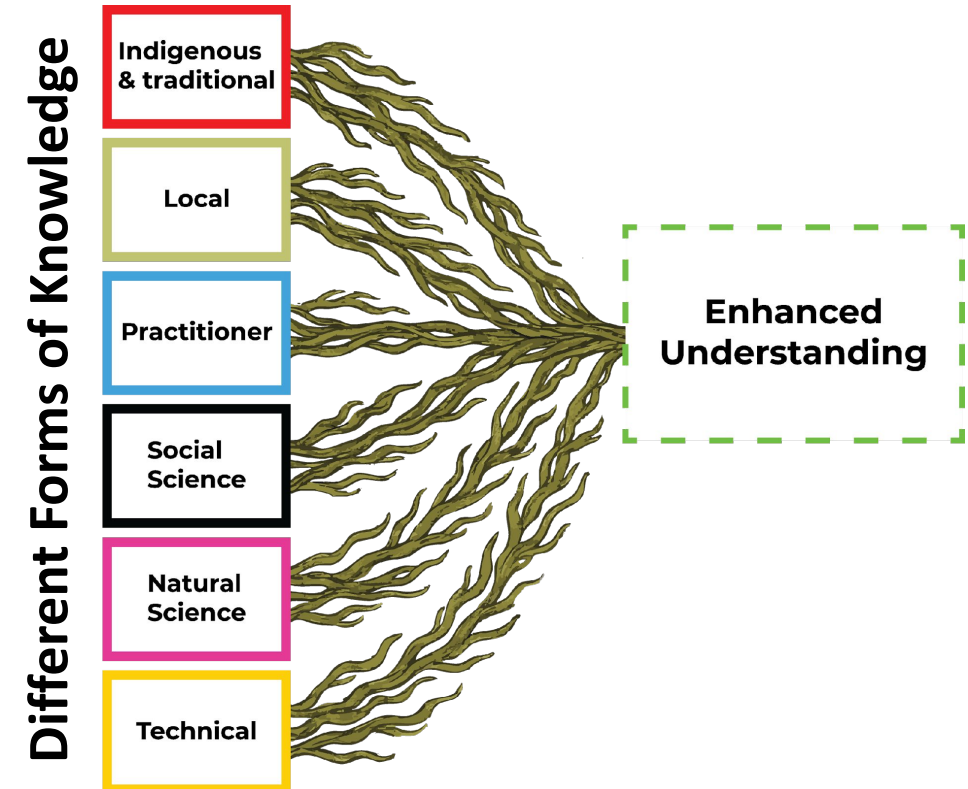
Development of the Kōkua CBM Framework

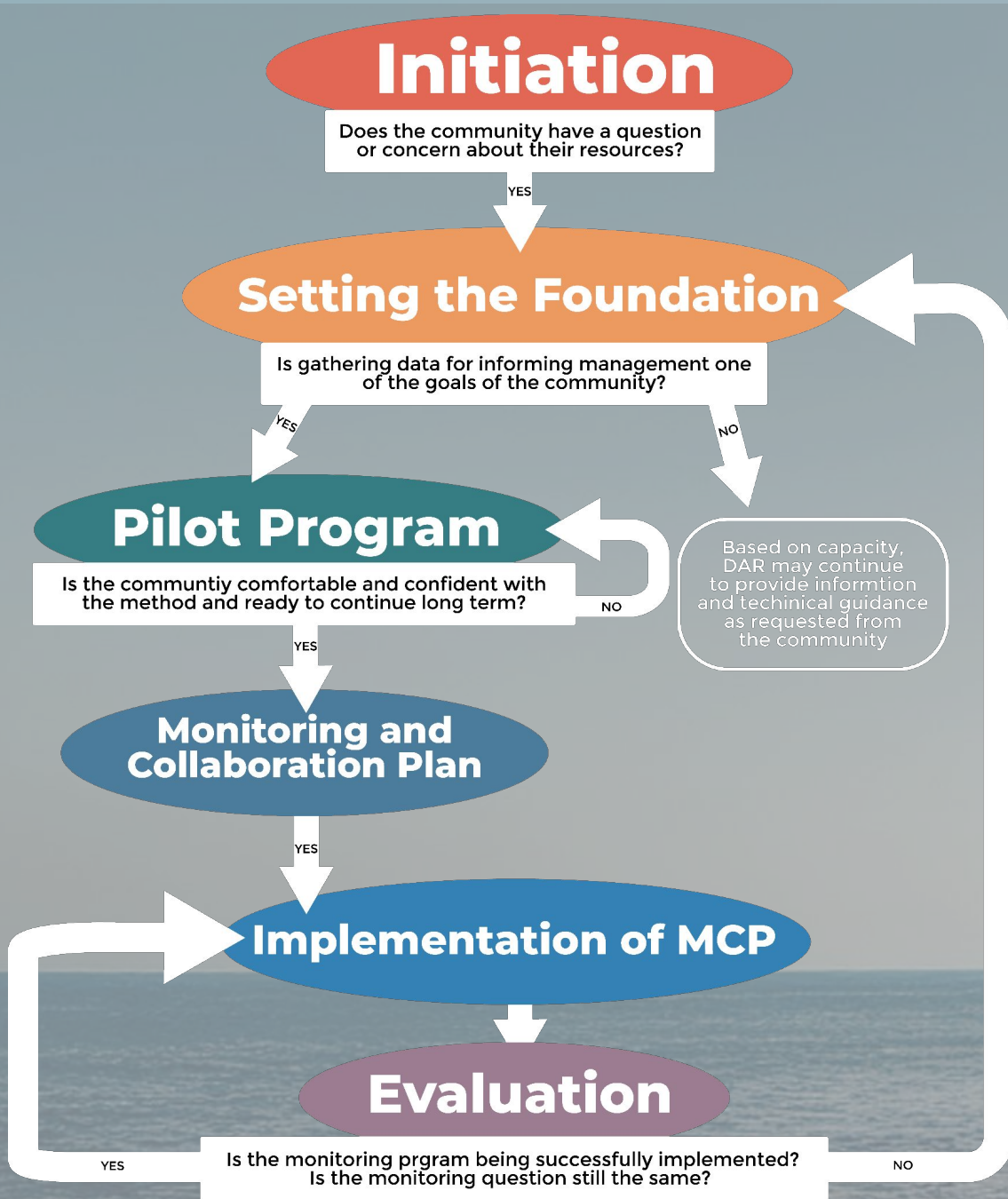


Intention Behind the Framework

- Create a pathway for data **collected by** and **anchored in** communities to be used to inform management.
- Support the development of a **robust monitoring program** that is targeted at gathering data that **delivers guidance**.
- Seeks to be **collaborative**, develop mutual **understanding**, and add value community efforts.

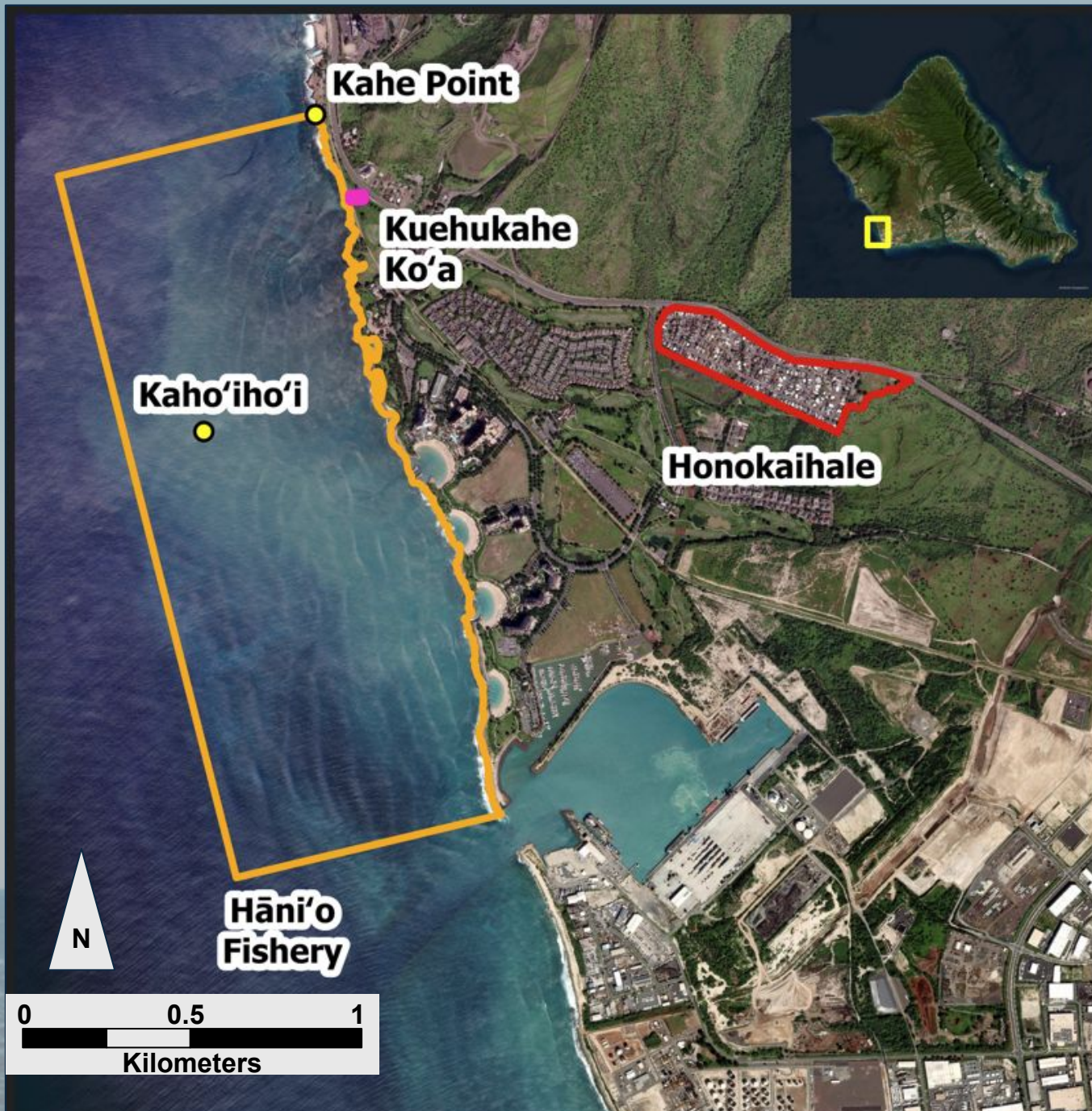
- Identifies key **opportunities** for support and sharing.
- Values **relationships** and **communication**.
- **Flexible** to incorporate different ways of knowing and monitoring, different communities' management objectives, and available capacity.





The Kōkua Community-based Monitoring Framework lays out the collaborative process for identifying monitoring methods & implementing a monitoring program. The community question and management goals drive the identification of monitoring methods.





Ahupua'a o Hono'uli'uli

Part of a highly productive coastal system, supporting many fisheries, cultural practices and linked agriculture with nearshore fisheries

Shifted land use to plantation agriculture and later resort and urban development, resulting in major alterations to the coastline, reefs, and groundwater systems.

Community kilo: Changes in fish diversity and abundance.

Pilot the Kōkua CBM Framework

Hāni'o, Oahu – Site Visit

- Walk Story of Site
- In-Water Assessment
- Developed Monitoring Menu



	Intertidal	Effort	Why?	Notes/Resources
Short-term	Initiate limu and intertidal monitoring	☆☆☆	This will help identify what limu exists and how population changes over time. This information may help identify appropriate management.	DAR can provide equipment, training, and protocol for monitoring.
Long-term	Limu restoration	☆☆	Limu surveys will help identify if limu restoration is a potential management action.	

Pilot the Kōkua CBM Framework



Pilot the Kōkua CBM Framework



Hanio.org
Kauikiokapo.com





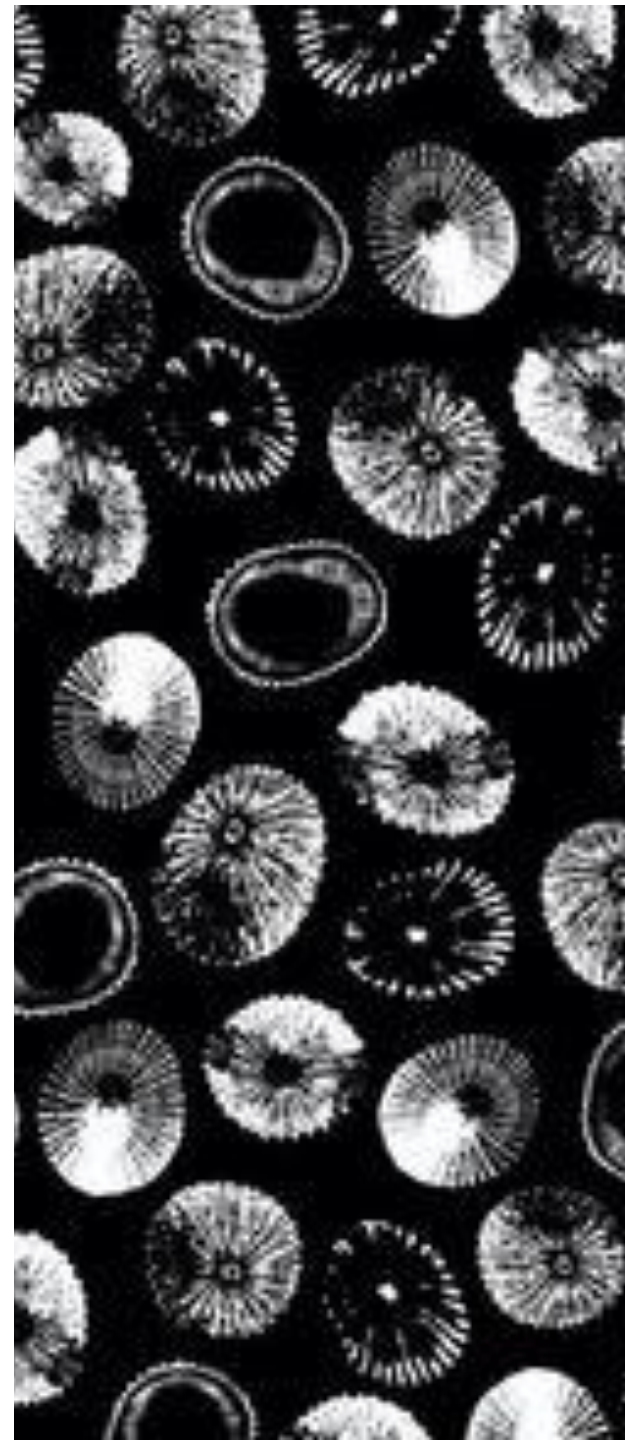
Key Takeaways from Phase I

- Supporting communities to develop and implement CBM programs requires **continuous** and **long-term commitment**.
- The Kōkua Community-based Monitoring Framework can be more successful in supporting place-based management if it is **nested within a larger co-management framework** and **incorporated into existing DAR programs**.



Kōkua Community-based Monitoring Project

- Phase 2 (2024 – 2025): Implementation and Evaluation
 - CZM Cooperative Agreement with NOAA Coastal Zone Management Program
 - Goals:
 - Continued implementation of framework
 - Identify opportunities to integrate with broader co-management efforts
 - Conduct evaluation of process for developing framework & implementation of framework



Continued Implementation of the Kōkua CBM Framework



Successes in Implementation

Continued implementation of community-led monitoring beyond initial trainings, demonstrating sustained engagement and local ownership.

Monitoring efforts remained **focused on locally identified priorities**, including nearshore resource condition, culturally important species, and water quality concerns.

Strengthened local capacity for repeatable monitoring, seasonal observation, and articulation of observed trends.

Improved management relevance of community-generated data, supporting internal agency discussions and coastal planning.

Increased trust and shared understanding between communities and agency partners through consistent engagement.

Challenges in Implementation

Variation in community capacity and continuity

Uncertainty around data sufficiency and decision thresholds

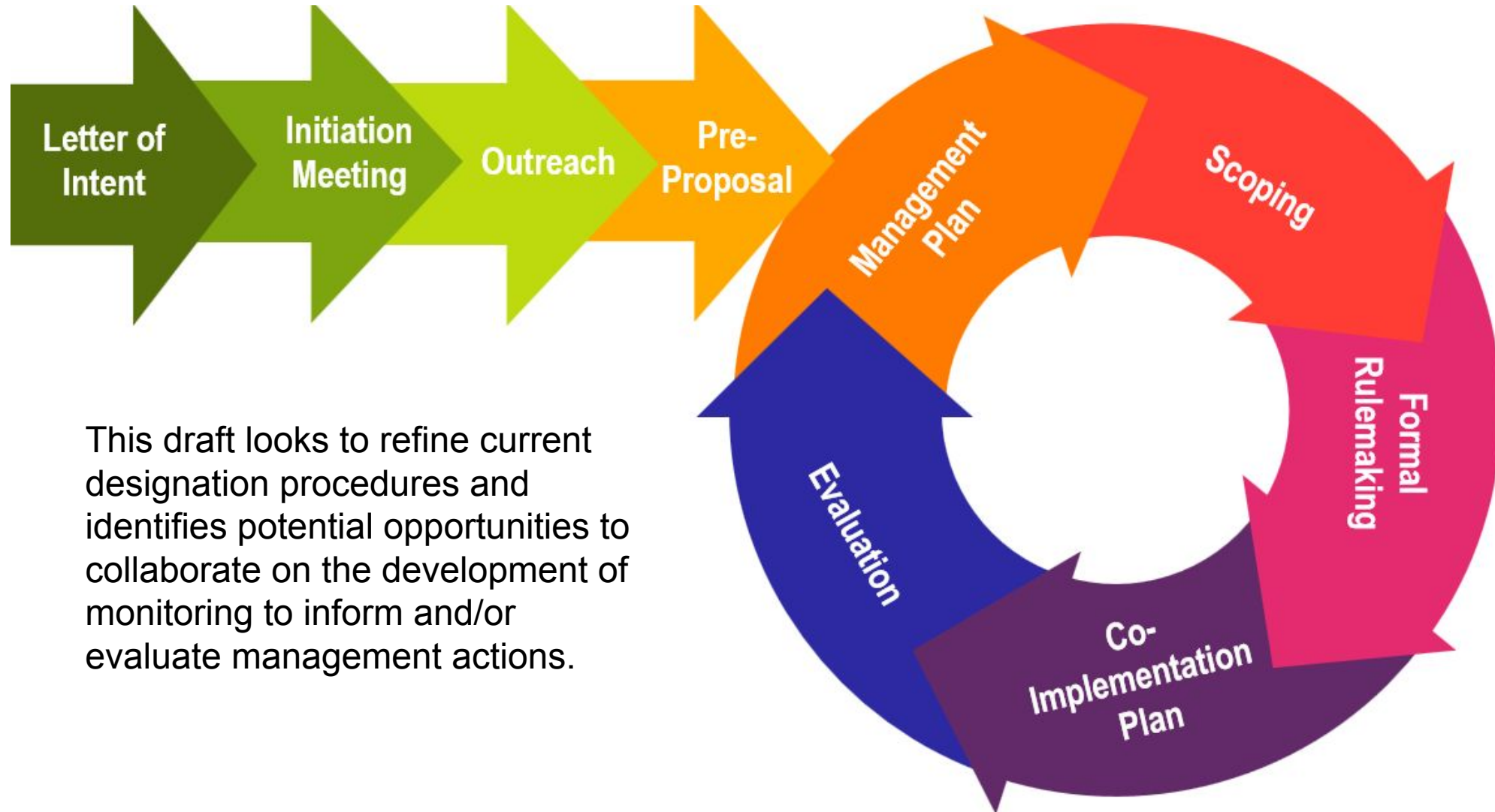
Translating monitoring into management or stewardship actions

Staffing and logistical constraints

Access to monitoring tools and **equipment**

Integration into Collaborative Management Frameworks

DRAFT Updated Designation Process



Evaluation Takeaways





Evaluation – Process Takeaways

Process: Evaluates the participatory process used to co-develop the framework, including how engagement, facilitation, and collaboration supported meaningful community involvement.

- Participatory engagement was widely viewed as a positive and an important approach, supporting relationship-building, shared understanding, and increased buy-in among communities and stakeholders.
- The pace of participatory processes matters, as timelines that move too slowly risk loss of momentum and participant interest if not intentionally managed and those that move too quickly may feel forced or insincere.
- Early, clear, and consistent communication is essential, helping prevent misinformation, surface challenges and barriers, and align expectations from the outset.
- Regular feedback loops and finding agreed upon ways to provide updates strengthen engagement, with participants emphasizing the importance of updates on progress and how their input informs next steps.
- Ongoing dialogue improves process quality, allowing issues to be addressed throughout the project rather than at its conclusion.
- Broad and inclusive engagement is desirable, including additional community groups and stakeholders such as fishing groups and other resource users.
- Relationship-building emerged as a core outcome of the process, not merely a byproduct, and is foundational to sustained collaboration.

5 BEST PRACTICES FOR COLLABORATIVE PROCESSES

As identified during the Kōkua Community-based Monitoring Project and Evaluation



Center Participant Engagement

Valuing relationship-building & shared understanding as core outcomes of the process.



Set an Intentional Pace

Balancing momentum with time for building trust, reflection & adaptation.



Communicate Clearly & Consistently

Aligning purpose, roles & expectations early.



Maintain Ongoing Dialogue and Feedback

Showing how input/efforts informs decisions & next steps.



Engage Broadly & with Focus

Prioritizing stakeholders most relevant to the work.





Evaluation – Outcome Takeaways

Outcomes: Assesses the short-term results of the framework development, such as changes in clarity, capacity, alignment, and readiness to apply the framework.

- Clarifying DAR's role and value-added for communities is critical, as many communities can initiate monitoring independently or through kāko'o organizations; clearer articulation strengthens engagement and alignment.
- Capacity constraints affect both communities and DAR, including limited staff time, challenges maintaining engagement, particularly long-term.
- Prioritize ongoing, place-based, in-person engagement, recognizing that meeting face to face in the place of the work strengthens relationships, deepens understanding of place, and builds trust between DAR and communities.
- Clear identification of management-relevant monitoring methods is identified as a gap, including standardized methodologies, equipment, and decision-support tools (e.g., monitoring menus and a Monitoring Decision Tree).
- Technical support and equipment identified as a priority need, particularly for pre-agreed upon methodologies, equipment, mapping/GIS, water quality and quantity monitoring, and access to relevant DAR datasets.
- Stronger inreach within DAR is needed to embed this work programmatically across Regional Teams and translate frameworks into consistent on-the-ground support.

Evaluation – Outcome Next Steps

1. Identify potential ways to address DAR capacity needs for ongoing, place-based engagement as essential to continued, meaningful implementation of the framework.
2. Scale up engagement with additional communities to learn from diverse implementation experiences, refine the framework, and build practical examples that demonstrate proof of concept.
3. Develop a monitoring decision tree that identifies pre-vetted monitoring methodologies based on the monitoring question. The decision tree will focus on the priority subsistence resources identified in Phase I of the project: ‘opihi (limpet), limu (algae), he‘e (octopus), and ‘ula (lobster).



Evaluation – Impact Takeaways

Impact: Examines the longer-term influence of the framework on relationships, stewardship practices, and the use of community-generated knowledge in management discussions.

- Trust remains a central barrier to long-term impact, particularly around data ownership, data protection, and recognition and utility of traditional knowledge and methods such as kilo.
- Concrete examples where community data leads to management change would be transformative, reinforcing credibility, trust, and continued participation both for communities and DAR.
- To better inform decision-making, and expand inclusion pathways for CBM data, clear communication among communities, the general public and internal DAR staff is needed regarding data standard requirements and how it can be formally integrated in management. This can help improve adaptive management.
- CBM is increasingly recognized as a key component of co-management, with optimism that its role will continue to expand statewide.
- In-person engagement is essential to achieving impact, with sustained presence in communities identified as foundational to trust and relationship-building.
- Sharing lessons learned across communities and within DAR can amplify impact, supporting continuous improvement, institutional learning and broader recognition.

Evaluation – Impact Next Steps

1. Clarify pathways from monitoring to management action
 - Limu case study, developing a method that integrates community limu data and kilo observations to support adaptive management of limu bag limits.
2. Actively seek opportunities to engage and elevate community voices in place-based initiatives to support meaningful participation and decision-making.
 - (e.g., Reefense Project on O‘ahu)
3. Facilitate internal discussions to integrate community-collected data into management, ensuring data ownership and use are guided by the community.



Mahalo!

Mahalo nui loa to everyone who participated in the program and shared their thoughts through the evaluation. This program is a living document, and we look forward to continuing to grow and refine program through practice.

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